

Report on the Washington Retirement Systems 2000

*Results of the 2000
Actuarial Valuations*

By the Office
of the State Actuary

Prepared In:
October 2001



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TABLE OF CONTENTS

LETTER FROM THE ACTUARY

SYSTEM MEMBERSHIP

◆	Overview	1
◆	2000 Active Membership by Employer	3
◆	Membership Status	5
◆	Membership Demographics	6

CONTRIBUTIONS

◆	Overview	9
◆	The Basis of Contribution Rates	10
◆	Results of the 2000 Valuation	13
◆	Allocation of Employer Contributions	14

BENEFITS

◆	Summary of Financial Activity	15
◆	Plan 1 Cost-of-Living Benefits	16
◆	Gain-sharing Distributions	18

FUNDING STATUS

◆	Overview	21
◆	The Calculation of Liabilities	21

RETIREMENT SYSTEM ASSETS

◆	Overview	25
◆	Valuing Fund Assets	25
◆	Allocation of Assets	26
◆	Growth of Assets 1996-2000	28
◆	Economic Components of the Valuation	28
◆	Plan 3 Defined Contribution Accounts	30



WASHINGTON STATE LEGISLATURE
Office of the State Actuary
Gerald B. Allard, State Actuary

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The state's retirement systems represent a large financial commitment for public agencies, for their employees, and for Washington taxpayers. The funding of retirement benefits is inherently complex but it is important for members, the public and legislators to have information available to assess the funding and health of the systems. Each year this office develops information on funding and the funded status of each of the systems in an "Actuarial Valuation." This study is performed according to accepted actuarial practices and statutorily-prescribed methods.

This "Report on the Washington Retirement Systems" provides the results of the latest actuarial valuations for the state's larger retirement systems. Other information is included to aid in understanding the operations and dynamics of the systems.

An actuarial valuation requires information about membership and assets, and a set of assumptions about future events. The Actuary's office does not maintain this data, but relies on other state agencies to supply the information necessary to the process. Membership data is provided by the Department of Retirement Systems. Asset information is supplied by the State Investment Board and assumptions are adopted by the Pension Funding Council. A chart of how these and several other agencies impact the retirement systems is printed on the back cover of the report.

The effective date for the Teachers' system is June 30, 2000. The effective date for all other systems is December 31, 2000.

You may receive additional copies of this Report by contacting the Office of the State Actuary.



System Membership

Overview

The state administers eight retirement **systems** for state and local public employees.

Retirement system membership is determined according to the participant's occupation and employer. Employees covered by each system are defined in separate chapters of the Revised Code of Washington (RCW).

The state also administers benefits for volunteer fire fighters and two small judicial systems. The judicial systems are closed to new members. Judges hired after June 30, 1988 are members of PERS 2.

The five largest retirement systems and a general description of their membership are listed below.

All of these systems are currently comprised of two or three benefit **plans**. Plans are tiers of benefits offered to employees first hired on or after a specified date. Beginning January 1, 2003, a Plan 2 set of benefits will become effective for new hires in the State Patrol system. The Public Employee's Retirement System (PERS) will initiate a Plan 3 tier of benefits March 1, 2002 for state employees and institutions of higher education and September 1, 2002 for local agencies.

In addition to the creation of new plans within existing systems, the Legislature created a new retirement system for non-teaching school district employees. PERS 2 members employed by school districts were moved into the School Employee's Retirement System Plan 2 (SERS 2) as of September 1, 2000. All eligible new hires after this date become members of SERS 3.

Public Employees' Retirement System (PERS) (Chapter 41.40 RCW): State employees; employees of all counties and most cities (the exceptions are Tacoma, Seattle, and Spokane); non-teaching employees of institutions of higher learning and community colleges; employees of ports, service districts, the Washington Public Power Supply System and public utility districts. Judges first elected or appointed after June 30, 1988 are also included.

Teachers' Retirement System (TRS) (Chapter 41.32 RCW): Certificated teachers; administrators; and educational staff associates.

School Employees' Retirement System (SERS) (Chapter 41.35 RCW): Classified school district employees.

Law Enforcement and Fire Fighter's Retirement System (LEOFF) (Chapter 41.26 RCW): Fire fighters; law enforcement officers including sheriffs; university, port and city police officers.

Washington State Patrol Retirement System (WSP) (Chapter 43.43 RCW): Commissioned officers of the Washington State Patrol.



2000 ACTUARIAL VALUATION REPORT

Some public employees are members of systems not administered by the state. These include faculty and some administrators at state colleges and universities. This group participates in defined contribution programs administered by individual institutions. Collectively, they are known as the Higher Education Retirement Plan. Information on Higher Education plans is not included in this report.

The cities of Seattle, Tacoma and Spokane maintain their own retirement systems. All municipal employees belong to the city systems, except police and fire fighters. Uniformed employees are members of the statewide LEOFF system.

By far the largest retirement system administered by the state is PERS. Public employees are mandated into PERS unless specifically required to participate in another system.

In the past, membership in the retirement plans has been determined by when a member is first hired for public employment. Plan 1 tiers were closed to new members when the Plan 2 tiers opened. When the Plans 3 were created in TRS and SERS, their Plans 2 were closed to new members. Beginning in 2002, the PERS system will have two plans open to new members at the same time. Newly-hired employees will have the option of becoming members of Plan 2 or Plan 3. The following table shows the relevant dates for each current plan and two future plans, PERS 3 and WSP 2.

Plan	Plan Status	
	Opened	Closed
PERS 1	10/1/47	9/30/77
TRS 1	3/1/38	9/30/77
LEOFF 1	3/1/70	9/30/77
WSP 1	6/12/47	12/31/02
PERS 2	10/1/77	On-going
TRS 2	10/1/77	6/30/96
LEOFF 2	10/1/77	On-going
SERS 2	9/1/00	9/1/00
WSP 2	1/1/03	On-going
TRS 3	7/1/96	On-going
SERS 3	9/1/00	On-going
PERS 3	3/1/02 or 9/1/02 ¹	On-going

¹ 3/1/02 for state employees; 9/1/02 for local government employees

2000 Total Membership By Plan & Status

Plan	Actives	Annuitants	Total ¹	% of All Actives	% of All Annuitants
PERS 1	25,833	53,161	78,994	8.7%	51.6%
PERS 2	126,428	7,927	134,355	42.5%	7.7%
TRS 1	17,222	29,839	47,061	5.8%	29.0%
TRS 2	8,356	519	8,875	2.8%	0.5%
TRS 3	38,280	92	38,372	12.9%	0.1%
SERS 2	25,714	27	25,741	8.7%	0.0%
SERS 3 ³	22,011	0	22,011	7.4%	0.0%
LEOFF 1	1,499	7,780	9,279	0.5%	7.6%
LEOFF 2	13,133	143	13,276	4.4%	0.1%
WSP	1,013	672	1,685	0.3%	0.7%
Others ²	17,645	2,812	20,452	5.9%	2.7%
Total	297,134	102,972	400,101	100.0%	100.0%

¹ Excludes terminated vested members and disabled members in WSP.

² Includes Volunteer Fire, Judicial and Judges.

³ Includes transfers after the valuation date.

Active members are those who continue to accrue benefits by virtue of employment in a position covered by one of the Washington retirement systems.

Annuitants are individuals receiving either retirement, disability or survivor benefits.

Terminated-vested members are individuals who have left active membership but have earned enough service credit to retain the right to a retirement benefit upon reaching retirement age. They may also return to active membership in the future and earn additional credit.

2000 Active Membership by Employer

Washington retirement system members are employed by over 1,200 individual state and local public entities.

The tables on the following page show the distribution of membership among these employers for the five largest retirement systems.

2000 ACTUARIAL VALUATION REPORT

Active Membership By Employer & Plan						
Employer	Total by Employer	PERS		TRS		
		Plan 1	Plan 2	Plan 1	Plan 2	Plan 3
State Agencies	59,764	9,808	48,736	132	13	62
Higher Education	18,577	2,428	15,972	64	7	4
Comm. Colleges	5,847	681	4,749	317	54	46
K-12	113,861	4,785	0	16,631	8,225	38,006
Counties	28,867	3,209	22,983	0	0	0
County Sub Div.	15,370	1,674	13,696	0	0	0
First Class Cities	8,159	470	2,717	0	0	0
Other Cities	15,927	1,264	10,007	0	0	0
Ports	2,143	282	1,680	0	0	0
Ed. Service Dist.	1,908	100	0	78	57	162
Fire Districts	2,513	36	431	0	0	0
Public Utility Dist.	3,814	710	3,104	0	0	0
Water Districts	1,628	228	1,400	0	0	0
WPPSS	1,067	114	953	0	0	0
Unions	44	44	0	0	0	0
Total	279,489	25,833	126,428	17,222	8,356	38,280

Active Membership by Employer & Plan					
Employer	SERS		LEOFF		WSP
	Plan 2	Plan 3	Plan 1	Plan 2	
State Agencies	0	0	0	0	1,013
Higher Education	0	0	0	102	0
Comm. Colleges	0	0	0	0	0
K-12	24,846	21,368	0	0	0
Counties	0	0	216	2,459	0
County Sub Div.	0	0	0	0	0
First Class Cities	0	0	755	4,217	0
Other Cities	0	0	399	4,257	0
Ports	0	0	13	168	0
Ed. Service Dist.	868	643	0	0	0
Fire Districts	0	0	116	1,930	0
Public Utility Dist.	0	0	0	0	0
Water Districts	0	0	0	0	0
WPPSS	0	0	0	0	0
Unions	0	0	0	0	0
Total	25,714	22,011	1,499	13,133	1,013

Membership Status

Members join and leave the systems by a variety of means. Tracking this activity identifies trends in membership and the effect of legislative changes on the systems' demographic experience.

The sequential relationship of the 1, 2 and 3 plans creates differences in the composition of plan membership. The older Plan 1 systems contain more annuitants than active members. In the younger 2/3 Plans, the opposite is true.

No new members have entered the Plan 1 tiers since 1977. TRS 2 membership was capped in 1996. Membership growth in these plans is comprised entirely of members who qualified for membership through prior employment, left the

system and have been rehired. In other plans, rehires are only a small percent of membership growth.

All retired members receive a benefit for life. Their benefit may continue after their death to a survivor or beneficiary. Whether a member leaves a beneficiary is determined either by the benefit payment option chosen at retirement or, in the case of the LEOFF 1 and WSP systems, by eligibility requirements defined in statute.

In the table below, new retirees are listed twice. In the "Active" portion of the table, new retirees include disability retirees and members who retire from active status. The "Annuitant" portion of the table includes the above, as well as members retiring from terminated vested status.

2000 Membership Status							
	PERS		TRS			SERS	
	Plan 1	Plan 2	Plan 1	Plan 2	Plan 3	Plan 2	Plan 3
1999 Actives	28,168	168,214	18,737	8,663	35,284	0	0
Transfers	0	(42,178)	0	(142)	201	22,868	17,808
Hires/ Rehires (+)	647	16,705	252	454	5,071	2,846	4,203
New Retirees (-)	(2,180)	(803)	(1,463)	(77)	(34)	0	0
Deaths (-)	(59)	(200)	(26)	(11)	(11)	0	0
Terminations (-)	(743)	(15,310)	(278)	(531)	(2,231)	0	0
2000 Actives	25,833	126,428	17,222	8,356	38,280	25,714	22,011
1999 Annuitants	52,515	6,765	28,920	398	50	0	0
New Retirees (+)	2,441	1,240	1,638	117	39	26	0
Annuitant Deaths (-)	(2,169)	(155)	(864)	(5)	0	0	0
New Survivors (+)	390	79	161	9	3	1	0
Terminations (-)	(16)	(2)	(16)	0	0	0	0
2000 Annuitants	53,161	7,927	29,839	519	92	27	0
Ratio Actives to Annuitants	0.49	15.95	0.58	16.10	416.09	952.37	N/A

2000 ACTUARIAL VALUATION REPORT

2000 Membership Status			
	LEOFF		WSP
	Plan 1	Plan 2	
1999 Actives	1,743	12,713	968
Transfers	0	0	0
Hires/ Rehires (+)	15	822	92
New Retirees (-)	(244)	(29)	(34)
Deaths (-)	(4)	(5)	0
Terminations (-)	(11)	(368)	(13)
2000 Actives	1,499	13,133	1,013
1999 Annuitants	7,623	100	647
New Retirees (+)	252	43	34
Annuitant Deaths (-)	(164)	(1)	(12)
New Survivors (+)	73	2	3
Returned to Work (-)	(4)	(1)	0
2000 Annuitants	7,780	143	672
Ratio Actives to Annuitants	0.19	91.84	1.51

Membership Demographics

Profile of Active Members: The number of Plan 1 members are decreasing each year through terminations and retirements. Not surprisingly, Plan 1 total salaries are also decreasing. However, due to annual salary increases, the total amount of salaries is decreasing at a slower rate than membership.

Total salaries will not show significant decreases until the rate of members leaving the plan is greater than the rate of salary increases.

Total annual salaries in Plans 2/3 are growing due to three factors: salary increases, overall growth in system membership and new members replacing retiring Plan 1 members.

2000 Active Member Demographics							
	PERS		TRS			SERS	
	Plan 1	Plan 2	Plan 1	Plan 2	Plan 3	Plan 2	Plan 3
Number of Active Members	25,833	126,428	17,222	8,356	38,280	25,714	22,011
Percent Change from 1999	(8.3%)	(24.8%)	(8.1%)	(3.5%)	8.5%	n/a	n/a
Total Annual Salaries (millions)	\$ 1,132	\$ 4,964	\$ 957	\$ 386	\$ 1,657	\$ 526	\$ 486
Percent Change from 1999	(4.4%)	(10.5%)	(2.7%)	3.5%	14.6%	n/a	n/a
Averages:							
Current Age	53.5	43.1	53.4	47.0	40.1	45.7	45.2
Years of Service	20.5	7.9	23.3	10.0	8.0	6.2	7.5
Annual Salary	\$43,827	\$39,265	\$55,580	\$46,230	\$43,288	\$20,466	\$22,073
Percent Change from 1999	4.2%	19.1%	5.8%	7.5%	5.6%	n/a	n/a



2000 Active Member Demographics

	LEOFF		WSP
	Plan 1	Plan 2	
Number of Active Members	1,499	13,133	1,013
Percent Change from 1999	(14.0%)	3.3%	4.6%
Total Annual Salaries (millions)	\$ 95	\$ 780	\$ 58
Percent Change from 1999	(10.4%)	7.6%	3.6%
Averages:			
Current Age	51.9	38.3	38.3
Years of Service	26.9	9.7	12.0
Annual Salary	\$63,296	\$59,410	\$57,745
Percent Change from 1999	4.3%	4.2%	0.4%

Profile of Annuitants: The Plan 1 tiers produce the most new retirees each year, but because they already have significant numbers of retirees, the annual percentage increase is small. In Plan 2, members are just beginning to reach retirement eligibility. While the actual numbers of new retirees is less than Plan 1, the percentage increases are much higher.

PERS 2 shows the most retirees of the Plan 2 tier. This is due to the larger active membership and a higher percentage of members first hired after age-50. Only members hired at older ages have had time to reach the age-65 eligibility for normal retirement.

The current group of Plan 2 retirees do not represent what eventually will be the typical retiree. The benefits of current Plan 2 retirees come from short service, late-age hires who have retired at age-65 or older.

Retirement can have a different meaning in the Plan 3 systems than in Plans 1 or 2. In Plan 3, members can begin receiving distributions from their defined contribution account at any age if they have left employment. At this point the member may consider himself to be "retired." For purposes of this report, only those members who have begun receiving monthly payments from the defined benefit portion of Plan 3 are considered retired.



2000 ACTUARIAL VALUATION REPORT

2000 Annuitant Demographics

	PERS		TRS			SERS	
	<i>Plan 1</i>	<i>Plan 2</i>	<i>Plan 1</i>	<i>Plan 2</i>	<i>Plan 3</i>	<i>Plan 2</i>	<i>Plan 3</i>
Number of Annuitants	53,161	7,927	29,839	519	92	27	0
Percent Change from 1999	1.2%	17.2%	3.2%	30.4%	84.0%	n/a	n/a
Total Annual Benefits (millions)	\$ 663	\$ 49	\$ 463	\$ 5	\$ 0	\$ 0	\$ 0
Percent Change from 1999	8.9%	25.6%	8.2%	66.7%	n/a	n/a	n/a
Averages:							
Current Age	73.1	69.4	71.2	67.8	59.9	64.8	0.0
Years of Service	20.5	11.6	25.5	12.2	14.9	14.7	0.0
Monthly Benefit	\$ 1,040	\$ 517	\$ 1,294	\$ 773	\$ 323	\$ 467	\$ 0
Percent Change from 1999	7.5%	7.0%	4.9%	6.5%	9.5%	n/a	n/a

2000 Annuitant Demographics

	LEOFF		WSP
	<i>Plan 1</i>	<i>Plan 2</i>	
Number of Annuitants	7,780	143	672
Percent Change from 1999	2.1%	43.0%	3.9%
Total Annual Benefits (millions)	\$ 235	\$ 2	\$ 20
Percent Change from 1999	6.3%	100.0%	5.3%
Averages:			
Current Age	63.7	61.2	63.0
Years of Service	22.2	12.5	28.2
Monthly Benefit	\$ 2,516	\$ 921	\$ 2,514
Percent Change from 1999	4.0%	16.4%	4.5%

Contributions

Overview

The retirement benefits provided by Washington's public employers are pre-funded by employer and employee contributions and investment earnings on those contributions. Money accumulates in the fund during members' working careers and is paid out in benefits when they retire.

This section describes the process by which contribution rates are determined. Later sections detail the costs of benefits and the accumulation of retirement assets.

Statutory Basis for 2000 Contribution Rates		
System	Employee	Employer/State
PERS 1 TRS 1	Set in statute at 6% of salary.	Balance of cost of benefits, equal to payment to amortize PERS 1 and TRS 1 unfunded liabilities plus Plan 2 normal cost.
LEOFF 1	Set in statute at 6% of salary. ¹	Employer rate set in statute at 6%. ¹ State pays balance of cost of benefits.
WSP	Temporarily set in statute at 3% of salary. ²	Balance of cost of benefits.
PERS 2	50% of the cost of PERS/SERS benefits as determined by valuation, less gain-sharing costs.	50% of the cost of benefits, plus additional payments to amortize PERS 1 unfunded liabilities and fund gain-sharing benefits.
TRS 2	No greater than the employer rate for Plans 2/3, less gain-sharing costs.	50% of the cost of benefits, plus additional payments to amortize TRS 1 unfunded liabilities and fund gain-sharing benefits.
SERS 2	50% of the cost of PERS/SERS benefits as determined by valuation, less gain-sharing costs.	50% of the cost of benefits, plus additional payments to amortize PERS 1 unfunded liabilities and fund gain-sharing benefits.
LEOFF 2	50% of the cost of benefits as determined by valuation.	Employer rate set in statute at 30% of benefit costs. State rate set in statute at 20% of benefit costs.
TRS 3 SERS 3	Employee does not contribute to the defined benefit plan, but contributes to the defined contribution benefit.	Same as Plan 2 rates.

¹ After 2000, employers and employees will make no contributions when the plan is fully funded.

² Matches employer rate but is no less than 2% after 7/1/01.



2000 ACTUARIAL VALUATION REPORT

The principle of pre-funded retirement benefits is to steadily put money into a fund during employees' working careers. This money is invested and its earnings added to the fund. The goal is to have "grown" enough money in the fund through contributions and investments that at retirement, the benefits members have earned will be fully funded. Contribution rates calculated by the valuation reflect a "best estimate" of the amount of contributions needed to accomplish this goal. The table on page 15 demonstrates this flow of funds into and out of the systems during 2000.

Contribution rates are expressed as percentages of pay. When these percentages are multiplied by active members' salaries and added to fund assets, the sum is expected to pay the projected cost of benefits. Because actual future costs are subject to some unknowns, such as inflation and investment return rates, arriving at a cost requires both statistical analysis and subjective decisions regarding economic and demographic assumptions.

The Basis of Contribution Rates

The basis for the contribution rate-setting process is contained in Chapter 41.45 RCW. Contribution rates are calculated every year by the State Actuary's Office in a special study called an actuarial valuation. Aspects of the valuation are closely prescribed by state law, Washington Administrative Code and professional actuarial standards. In general, contributions are determined either by a specific rate set in statute or by actuarial valuation.

Retirement funding law identifies some factors to be included in the contribution rate calculation. One requirement is that the cost of any benefits enacted after the valuation rates are determined must be added to the rates beginning the next fiscal year (September 1). This requirement often causes the rates actually charged to employers to differ from the rates arrived at through the valuation process.

The rate-setting process set in statute is based on the two-year biennial cycle. This approach is designed to allow state and local employers to budget a stable percent of salaries for retirement benefits during the ensuing biennium. Valuations are conducted every year, but only the results in odd-numbered years are used to determine contribution levels. Results of even-year valuations are used primarily to cost proposed legislation and track system experience.

Once odd-year rates are calculated, they are submitted to the Pension Funding Council (PFC) for official adoption. The Department of Retirement Systems is required to charge the adopted rates unless the Legislature enacts changes requiring a rate increase or decrease. In almost every biennium, benefit legislation is enacted that requires such adjustment. Adjusted rates become effective at the beginning of the fiscal year unless specified by the Legislature.

In addition to benefit changes, it is expected that actuarial changes will also occur. Shifts in membership demographics and economic gains and losses are recognized in every valuation, but only affect the rate-setting process every two years.

CONTRIBUTIONS

The actuarial reconciliation tables below show the degree to which employer and state contribution rates have been affected by legislation and actuarial factors. Negative changes indicate that gains and/or assumption changes have occurred that will cause contribution rates to be reduced. Positive changes indicate that losses have occurred, or plan improvements were made causing rates to increase.

Actuarial Reconciliation of 2000 Contribution Rates Employer and State Contribution Rates

	PERS	TRS	SERS	LEOFF 1*	WSP**
1999 Valuation	3.21%	5.38%	3.21%	0.00%	0.00%
Changes Resulting from Legislation	(1.67)%	(2.63)%	(1.67)%	0.00%	0.00%
Adjusted 1999 Valuation	1.54%	2.75%	1.54%	0.00%	0.00%
Economic Gains and Losses	0.20%	(1.41)%	0.01%	(0.51)%	(0.21)%
Demographic Gains and Losses	0.07%	0.12%	0.16%	(0.01)%	(0.08)%
Other Gains and Losses	(0.18)%	0.92%	(0.41)%	(1.27)%	(1.89)%
Contribution from SERS for PERS UAAL	—	—	(0.08)%	—	—
2000 Valuation	1.63%	2.38%	1.22%	0.00%	0.00%

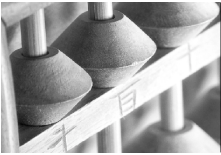
* Only the effect on the UAAL rate is shown.

** WSP changed to the Aggregate Funding Method.

Actuarial Reconciliation of 2000 Employer and State Contribution Rates To Plan 2 and Plan 3 Only

	PERS 2	TRS 2/3	SERS 2	LEOFF 2 ¹
1999 Valuation	1.70%	2.59%	1.70 %	2.31%
Changes Resulting from Legislation	(0.82)%	(0.90)%	(0.82)%	(0.51)%
Adjusted 1999 Valuation	0.88%	1.69%	0.88 %	1.80%
Economic Gains and Losses	0.27%	(0.08)%	0.01 %	0.05%
Demographic Gains and Losses	0.03%	0.08%	0.16 %	0.00%
Other Gains and Losses	(0.13)%	0.07%	(0.41)%	(0.24)%
2000 Valuation	1.05%	1.76%	0.64 %	1.61%

¹ We have only shown the LEOFF 2 state contribution rate which is 20% of the cost.
The LEOFF 2 employer contribution rate is 30% of the cost.



2000 ACTUARIAL VALUATION REPORT

The first two tables below show results of the actuarial valuations for the last three years. Valuation rates calculated in 1998 (an even-numbered year) are usually used for tracking purposes only. In that biennium however, the Legislature enacted rate changes based on these results. Rates calculated in the 1999 valuation established baseline contributions for the 2001-03 Biennium. 2000 rates are for tracking purposes only.

One aspect of the valuation rates which often causes confusion is that they are calculated in the year after the one for which data is collected. Hence, the 1998 valuation is conducted in 1999, the 2000 valuation in 2001. In addition, rates are usually not scheduled to go into effect immediately. In the interval between the determination and effective date of rate changes, legislation is often enacted altering the rates actually charged to employers and employees. The rates shown on the facing page are the valuation rates, after they have been impacted by legislation.

Employer/State Valuation Contribution Rates					
	Plan		1998	1999	2000
PERS	All	Employer	3.49%	3.21%	1.63%
TRS	All	Employer	5.81%	5.38%	2.38%
SERS	All	Employer	—	—	1.22%
LEOFF	1	Employer	6.00%	0.00%	0.00%
		State	0.00%	0.00%	0.00%
LEOFF	2	Employer	3.22%	3.46%	2.41%
		State	2.14%	2.31%	1.61%
WSP		Employer	0.00%	0.00%	0.00%

Employee Valuation Contribution Rates				
	Plan	1998	1999	2000
PERS	1	6.00%	6.00%	6.00%
	2	1.49%	1.70%	1.05%
TRS	1	6.00%	6.00%	6.00%
	2	1.71%	2.15%	1.29%
SERS	2	—	—	0.46%
LEOFF	1	6.00%	0.00%	0.00%
	2	5.36%	5.77%	4.02%
WSP		7.00%	7.00%	2.00%

CONTRIBUTIONS

Employer/State Contribution Rates Charged			As of			
	Plan		7/1/99	5/1/00	9/1/00	7/1/01
PERS	All	Employer	4.41%	3.58%	4.44%	1.54%
TRS	All	Employer	8.49% ¹	6.03%	7.10%	2.75% ³
SERS	All	Employer	—	—	4.44%	1.54% ³
LEOFF	1	Employer	6.00%	6.00%	0.00% ²	0.00%
	1	State	0.00%	0.00%	0.00%	0.00%
LEOFF	2	Employer	3.52%	3.25%	4.07%	2.70%
	2	State	2.35%	2.16%	2.71%	1.80%
WSP		Employer	0.00%	0.00%	0.00%	0.00%

¹ TRS rates were implemented September 1, 1999.

² LEOFF rates were implemented July 1, 2000.

³ TRS and SERS rates were implemented September 1, 2001.

Employee Contribution Rates Charged			As of			
	Plan		7/1/99	5/1/00	9/1/00	7/1/01
PERS	1		6.00%	6.00%	6.00%	6.00%
	2		1.85%	1.54%	2.43%	0.88%
TRS	1		6.00%	6.00%	6.00%	6.00%
	2		2.94% ¹	1.85%	3.01%	1.23% ³
SERS	2		—	—	2.43%	0.88% ³
LEOFF	1		6.00%	6.00%	0.00% ²	0.00%
	2		5.87%	5.41%	6.78%	4.50%
WSP			7.00%	7.00%	3.00% ²	2.00%

¹ TRS rates were implemented September 1, 1999.

² LEOFF rates were implemented July 1, 2000.

³ TRS and SERS rates were implemented September 1, 2001.

Results of the 2000 Valuation

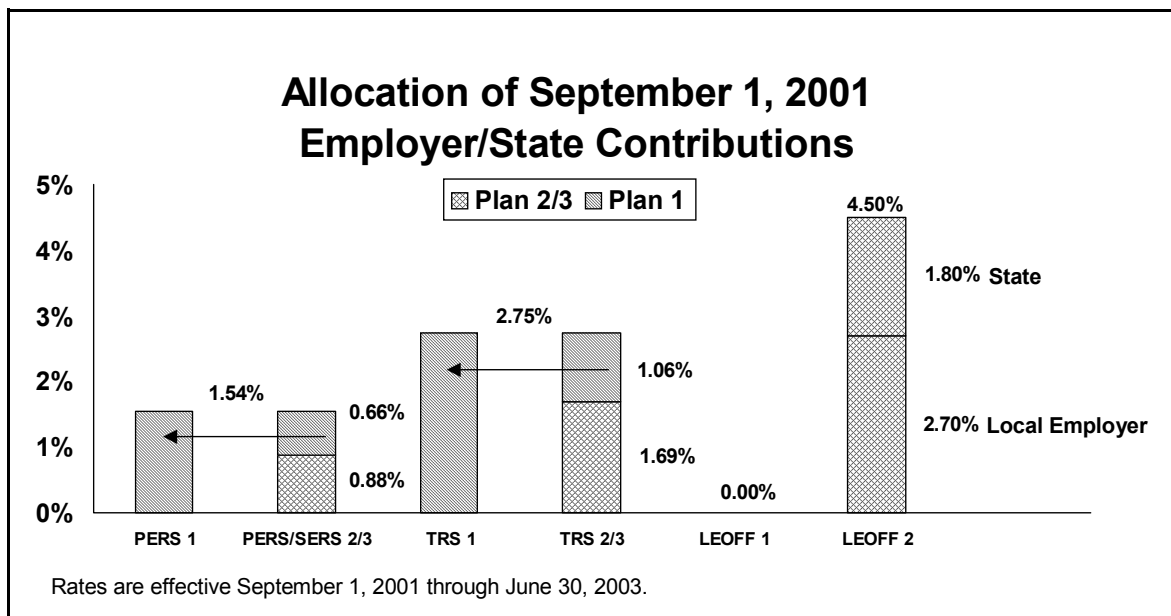
The rates shown in the table below are those determined by the 2000 actuarial valuation. They are identical to the numbers shown in the last column of the valuation rates tables above but have been reformatted for ease of reference.



2000 ACTUARIAL VALUATION REPORT

2000 Valuation Rates								
	PERS		TRS		SERS	LEOFF		WSP
	Plan 1	Plan 2/3	Plan 1	Plan 2/3	Plan 2/3	Plan 1	Plan 2	
Employee	6.00%	1.05% ¹	6.00%	1.29% ¹	0.46% ¹	0.00%	4.02%	2.00%
Employer	1.63%	1.63%	2.38%	2.38%	1.22%	0.00%	2.41%	0.00%
State	—	—	—	—		0.00%	1.61%	—

¹ Applies to Plan 2 only.



Allocation of Employer Contributions

Employees in the PERS, TRS and SERS systems contribute different amounts depending on whether they are members of Plan 1 or 2/3. The employers, however, contribute at the same rate regardless of which plan the employee is a member.

All of the money employees contribute goes into the plan fund in which they are members. The same is not true of all employer contributions. A portion of contributions from Plan 2/3 employers is distributed to the Plan 1 funds. This funding is targeted toward amortizing the PERS/TRS 1 unfunded liabilities by the year 2024. More detailed information on liabilities and funding issues is contained in the funding section.

Benefits

Summary of Financial Activity

Contributions paid into the retirement funds are one aspect of the actuarial valuation. The monthly benefits paid out of the funds are another component. In this section, the cost of benefits is shown for each plan within the framework of their annual cash-flow. Also included is information specific to cost-of-living adjustments in the Plan 1 tier. When applicable the calculation of gain-sharing increases to the Uniform and minimum COLA amounts.

The table below provides an overview of the retirement systems' cash-flow during the 2000 valuation year. The left side of the table shows the contributions made to the systems by members and employers. The center column reflects the dollar amount of investment return on contributions and assets. On the right-hand side, money leaving the retirement systems is depicted under the heading of "Benefits."

2000 Cash Flow in the Retirement Systems

<i>Dollars in Millions</i>		Contributions (+)			Benefits (-)		
	Beginning Fund Balance (at Market)	Employees	Employers & State	Investment Income and Misc. (+)	To Annuitant	Refund of Employee Contributions & Expenses ²	Ending Fund Balance (at Market)
PERS 1	\$ 11,082	\$ 72	\$ 187	\$ 55	\$ 644	\$ 10	\$ 10,744
PERS 2	12,036	105	105	152	46	1,961*	10,392
TRS 1 ¹	9,002	58	183	1,148	466	120	9,805
TRS 2/3	3,006	13	75	393	5	85	3,397
SERS 2/3	0	7	8	(104)	0	23	1,790*
LEOFF 1	5,460	3	3	26	232	0	5,260
LEOFF 2	2,288	47	47	9	1	11	2,378
WSP	702	3	0	3	20	0	688

¹ Refunds of employee contributions include withdrawn annuities at retirement.

² Includes transfers to Plan 3 Defined Contribution Plan.

* Includes \$1,902 transfer from PERS to SERS.

During 2000, the Plan 1 systems paid out substantially more in benefits than the Plan 2/3 systems. This is characteristic of older plans, where a large number of members have had the opportunity to complete careers of 25 to 30 years before becoming eligible for retirement.

The Plan 2/3 systems have smaller balances and pay out far less money in benefits. Having been created less than 25 years ago, they are considered relatively young by pension system standards. At this point, fewer Plan 2/3 members are eligible to retire than Plan 1 members. Those members that do retire have



2000 ACTUARIAL VALUATION REPORT

earned less service credit and have smaller salaries. As a result, their benefits tend to be lower than Plan 1 benefits. (The Membership Section provides more details about average benefit amounts.)

Plan 1 Cost-of-living Benefits

Annual increases to benefits (known as cost-of-living adjustments or COLAs) are a relatively recent addition to PERS 1 and TRS 1 benefits. Unlike other systems administered by the state, original provisions of PERS 1 and TRS 1 did not include a mechanism for regularly increasing benefits after members retired.

COLAs in PERS/TRS 1 were granted ad-hoc, meaning the Legislature approved one-time increases as it deemed appropriate without making a commitment to future increases.

This situation changed in 1989 with the enactment of the Plan 1 Age-65 COLA. Six years later, the Uniform COLA superceded the Age-65 COLA with a new benefit design and eligibility requirements. The majority of retirees are, or will become, eligible for the Uniform COLA. A very small number of retirees receive post-retirement increases through other COLA designs.

PERS/TRS 1 Cost-of-Living Adjustments

COLA Type	Retirees Receiving*	Increase	Eligibility
Uniform	57,269	A flat amount which increases 3% a year. Annual increase is multiplied by member's years of service.	Age 66 or older and retired one year.
Minimum Benefit	865	Equal to Uniform COLA.	Age 65 or younger; and earned benefit is less than \$28.33 per month/year service, (as of 7/1/00.)
Gain-Sharing	58,134	Biennial increase in the Uniform COLA contingent on extraordinary investment returns.	Receiving the Uniform COLA or Minimum Benefit.
Benefit Payment Option	225	At retirement, member may elect an actuarially reduced initial benefit which increases up to 3% annually based on increases in the CPI.	Members retired after 1990.
Age-65	27	Annual increase of up to 3%, based on increase in the CPI.	Retirees whose age-65 retirement benefit purchasing power is reduced to less than 60%, as determined by increases in the Consumer Price Index.

*2000 Valuation Data



Plan 1 retirees age-65 or younger who had earned a benefit less than \$28.33 per month per year of service in 2000, were eligible to receive a benefit increase under minimum benefit provisions. The minimum benefit provides members who qualify for low monthly benefits with a guaranteed level of retirement income. Increases in the minimum benefit match those for the Uniform COLA. After a minimum benefit recipient reaches age-66, they are counted as Uniform COLA recipients.

The Uniform COLA and Minimum Benefit were both modified in 1998 with a feature known as "gain-sharing." This feature provides a permanent increase to the amount of the Uniform and Minimum Benefit COLAs when certain conditions regarding investment return are met.

Uniform COLA Recipients

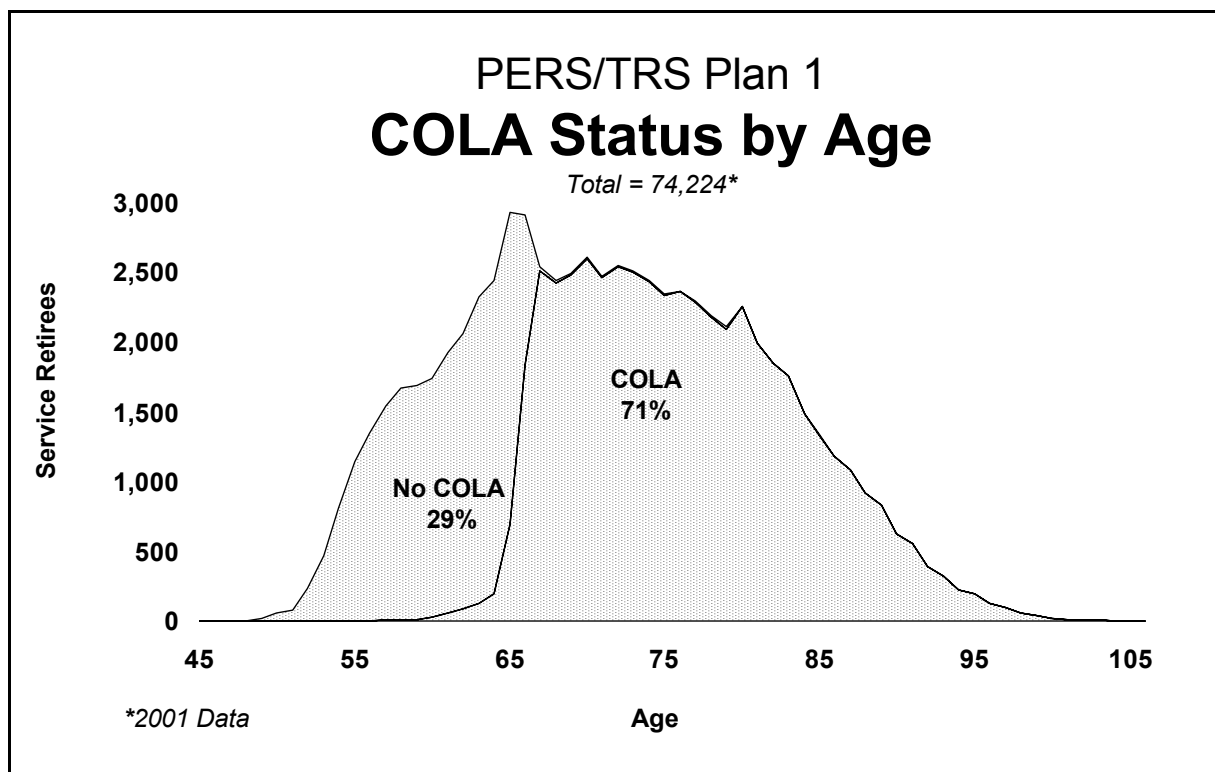
The Uniform COLA is a flat amount per month per year of service. In statutory language it is referred to as the "annual increase amount." This amount grows by 3% each year.

The increase is payable to:

- Retirees age-66 or older who have been retired at least one year; and
- Retirees less than age-66 who are eligible for the minimum benefit.

Statistics regarding the amount of increases and who receives them are collected and analyzed by the Actuary's Office each year. The table below shows characteristics of current Uniform and Minimum COLA recipients.

PERS/TRS 1 Uniform and Minimum COLA Recipients <i>(as of 7/1/01)</i>		
	PERS 1	TRS 1
Recipients	40,249	20,053
Increase in Uniform COLA Benefits	\$ 10,199,350	\$ 6,562,238
Averages:		
Current Age	77	77
Age at Retirement	62	60
Year of Retirement	1985	1984
Monthly Benefit per YOS	\$ 42	\$ 46
Monthly Benefit	\$ 842	\$ 1,143
Years of Service	19	25
Years Retired	16	17



Gain-Sharing Distributions

Gain-sharing is a mechanism that increases benefits in PERS 1, TRS 1 and all the Plans 3. These increases are not automatic, but contingent on extraordinary investment return. In reference to gain-sharing, extraordinary returns occur when the funds average investment gains more than 10% for the previous four-year period.

When the previous four-year average exceeds 10%, a calculation is performed to determine the amount of extraordinary gains that will be distributed to eligible members. Gain-sharing calculations are made once each biennium with distributions occurring in January of even-numbered years.

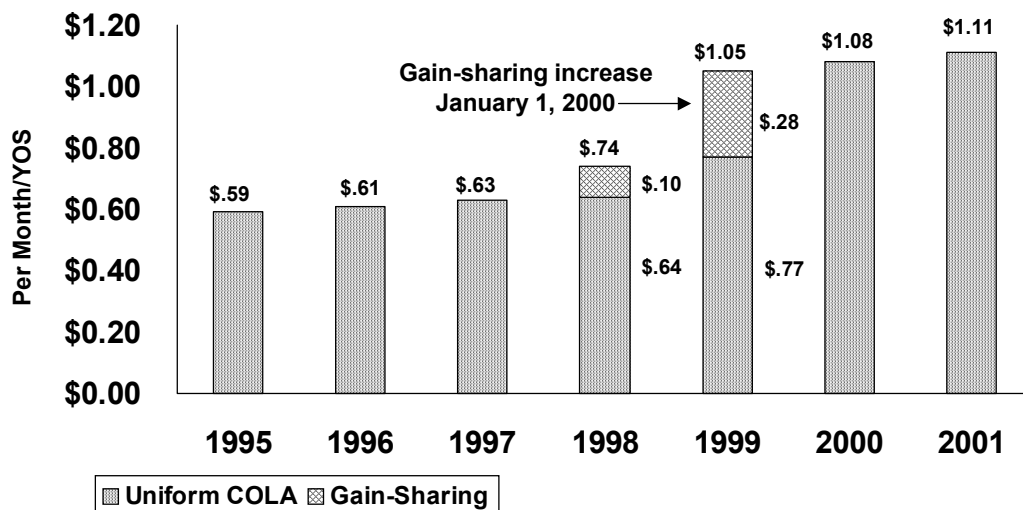
Gain-sharing for PERS/TRS 1

As implemented for PERS/TRS 1, gain-sharing divides extraordinary investment gains between three sectors of retirement funding. When four-year average gains are over 10%, half of the amount over 10% is used to permanently increase the Uniform COLA. The other half is used to amortize unfunded liabilities ahead of schedule. All other gains act to reduce future employer contribution rates, and offset losses in other years.

PERS/TRS 1 members benefit from gain-sharing even if they are not yet retired because each distribution permanently boosts the Uniform COLA amount. If no additional extraordinary gains were realized by the retirement funds, future COLAs will still be higher because of past gains. The following graph demonstrates the effect past gain-sharing has had on the Uniform COLA.



PERS/TRS Plan 1 Uniform COLA Increases



Gain-sharing for TRS 3 Members

In the Plan 3 systems, the same 10% rate of return is used to determine when extraordinary returns have occurred. A second calculation is then made to determine the amount of gains to be distributed.

First, Plan 3 members' service is divided by all system members' service. This produces the percentage of Plan 2/3 retirement funds which can be attributed to Plan 3 member service. The Plan 3 percentage is then multiplied by the dollar amount of gains over 10%.

In the Plans 3, active, retired and term-vested members are eligible for gain-sharing distributions. Distributions are a lump sum that is deposited directly into members' defined contribution accounts. Only those members who are eligible at the time of the calculation receive gain-sharing payments.

In the following table note that the total amount of earnings earmarked for distribution is much larger in the Plans 1, than TRS 3. This is because the Plan 1 funds are much larger. When a gain-sharing percentage is applied to the asset value, the result is a larger product.

All members of PERS/TRS 1 will see an increase in the Uniform COLA amount because of gain-sharing. The number of members shown below is equal to those who were retired at the time of the distribution.

The total amount of Plan 3 distributions is expected to grow rapidly as PERS/SERS 2 members transfer to Plan 3 and their years of service continue to accumulate. With more members eligible for gain-sharing, future increases in distributions will not necessarily translate into larger payments per member.



2000 ACTUARIAL VALUATION REPORT

Summary of Gain-Sharing Statistics		
<i>Dollars in Millions</i>	PERS/TRS 1	TRS 3
2000 Distribution		
1996-2000 Average Return Over 10%	6.56%	6.56%
1996-2000 Gain-sharing Total	\$1,268	\$73
Purchase Benefit Increase	\$634	\$73
Shorten UAAL Amortization Period	\$634	—
Members Receiving Distribution	60,052	35,529
1998 Distribution		
1993-1997 Average Return Over 10%	3.70%	3.70%
1993-1997 Gain-sharing Total	\$580	\$28
Purchase Benefit Increase	\$290	\$28
Shorten UAAL Amortization Period	\$290	—
Members Receiving Distribution	59,470	27,243



Funding Status

Overview

The goal of pension funding is to accumulate enough money during a member's working career to pay retirement benefits after the member retires. Measurements of funding status indicate how well a retirement plan is accomplishing that goal. There are two standard indicators of funding status: the funding ratio and the existence of an unfunded liability.

Neither the funding ratio nor the unfunded liability are used in the calculation of contribution rates, but are valuable in other ways. They are used for comparison with other systems and for monitoring the progress of funding over time. Both measure the benefit obligations, or liabilities, of a plan against its assets. This section details the types and cost of benefits members are expected to earn. The next section addresses system assets.

The Calculation of Liabilities

Liabilities accrue almost entirely from retirement, death or disability benefits. Members who terminate employment before becoming eligible for retirement add little to total system liabilities.

The challenge of projecting liabilities lies in accurately predicting the number of members who will qualify for benefits and the total cost of benefits they will become eligible to receive.

The calculation of liabilities is complex. It is based on benefits described in statute and uses actuarial methods; demographic assumptions

developed from past experience; economic assumptions adopted by the PFC; and data provided by DRS. These components are entered into a mathematical model which projects the cost of future benefits.

Liabilities can be represented several different ways, depending on how member salaries and service credit are interpreted. In the Washington retirement systems, the Present Value of Credited Projected Benefits (CPB) is used in determining the funding ratio. This expresses the cost of future retirement benefits in today's dollars. It uses the salaries members are projected to earn in the future, but only the amount of service members have earned to date. An unfunded liability measures the fund's assets against the benefits earned through the valuation year.

Funding Ratios

A funding ratio represents the percent of benefits members have earned that can be paid by current assets. It is determined by dividing the valuation assets by the CPB. If adequate contributions are made from a plan's inception and experience matches assumptions, funding status is maintained at or above 100%. However, assumptions are developed to predict experience over a long period of time. Experience in any one year is almost certain to be different. Thus funding status can be expected to vary moderately from year to year. Funding ratios are most useful in tracking funding status over a series of years.



2000 ACTUARIAL VALUATION REPORT

2000 Funding Status Summary				
<i>(Dollars in Millions)</i>	Credited Projected Benefits	Valuation Assets	Unfunded Liability (Surplus)	Funding Ratio
PERS 1	\$ 11,337	\$ 11,111	\$ 227	98%
PERS 2	5,671	10,749	(5,078)	190%
TRS 1	9,376	9,372	4	100%
TRS 2/3	1,654	3,250	(1,596)	196%
SERS 2/3	1,092	1,853	(761)	170%
LEOFF 1	4,010	5,440	(1,430)	136%
LEOFF 2	1,528	2,459	(931)	161%
WSP	468	712	(244)	152%
Total	\$ 35,136	\$ 44,946	\$ (9,809)	128%

Young benefit plans, like the 2/3 tiers, often have funding ratios greater than 100%. Contributions are being collected at a percent of pay, which over the course of the members' working career is projected to pay for benefits. At this point in time however, members are not near enough to retirement to have created a large liability. As these plans mature and their members draw closer to retirement, the funding ratio will decline toward 100%.

Unfunded Liabilities

All plans created since 1977 are required by law to collect contributions at a rate that fully funds benefits. This requirement applies to all Plans 2 and 3. Full funding is achieved by biennial adjustment of contribution rates to levels sufficient to fund the benefits currently provided in statute and requiring any new benefits enacted be accompanied by sufficient increases in contributions.

An unfunded liability occurs when a plan's assets total less than its benefit liabilities. The unfunded liability number represents the dollar value of earned benefits not funded by current assets.

Only PERS 1 and TRS 1 currently have unfunded liabilities.

2000 Credited Projected Benefits					
<i>(Dollars in Millions)</i>					
	PERS		TRS		SERS
	<i>Plan 1</i>	<i>Plan 2</i>	<i>Plan 1</i>	<i>Plan 2/3</i>	<i>Plan 2/3</i>
<u>Active Members:</u>					
Future Retirees	\$ 4,041	\$ 4,025	\$ 3,809	\$ 1,334	\$ 552
Vested, Terminated	20	168	38	66	35
Death Benefits	30	60	27	21	8
Disability Benefits	34	83	18	9	10
Uniform COLA	331	—	278	—	—
Refund on Termination	16	154	6	8	14
Refund on Death	32	84	25	9	6
Total Active	\$ 4,504	\$ 4,575	\$ 4,201	\$ 1,446	\$ 625
<u>Inactive Members:</u>					
Vested, Terminated	\$ 173	\$ 557	\$ 184	\$ 119	\$ 15
Current Retirees	5,260	485	3,958	59	2
Disability Retirees	105	34	87	3	0
Survivors	321	19	162	2	0
Uniform COLA	842	—	673	—	—
Total Inactive	\$ 6,700	\$ 1,096	\$ 5,064	\$ 183	\$ 18
Sub-Total	11,204	5,671	9,265	1,630	643
Gain-sharing	133	—	111	24	448*
Grand Total	11,337	5,671	9,376	1,654	1,092

*Includes transfer to DC.



2000 ACTUARIAL VALUATION REPORT

2000 Credited Projected Benefits			
<i>(Dollars in Millions)</i>			
	LEOFF		WSP
	<i>Plan 1</i>	<i>Plan 2</i>	
<u>Active Members:</u>			
Future Retirees	\$ 436	\$ 1,396	\$ 189
Vested, Terminated	1	17	2
Death Benefits	12	8	5
Disability Benefits	258	8	0
Uniform COLA	—	—	—
Refund on Termination	0	23	0
Refund on Death	3	21	1
<i>Total Active</i>	\$ 711	\$ 1,474	\$ 198
<u>Inactive Members:</u>			
Vested, Terminated	\$ 13	\$ 34	\$ 4
Current Retirees	1,063	18	254
Disability Retirees	1,902	2	1
Survivors	322	0	11
Uniform COLA	—	—	—
<i>Total Inactive</i>	\$ 3,299	\$ 55	\$ 270
Sub-Total	4,010	1,528	468
Gain-sharing	—	—	—
Grand Total	4,010	1,528	468

Retirement System Assets

Overview

Each retirement system maintains its own separate asset fund, from which benefits are paid. For investment purposes, however, these funds are combined into one fund known as the Co-mingled Trust Fund (CTF). Individual funds own a proportionate share of the CTF, much as individuals own shares in a mutual fund.

Assets are managed and invested by the State Investment Board (SIB.) The 14-member board is comprised of four retirement system members; one legislator each from the House and Senate; the State Treasurer; and the directors of the Department of Labor and Industries and DRS. Five non-voting members, each with experience in the field of investments, are appointed by the board.

The SIB directs the work of an executive director and chief investment officer in the investment of retirement funds. All information about assets and investment activities comes from the SIB.

Fund investments are governed by guidelines contained in statute. A cornerstone of these guidelines is the "prudent man" standard. Investments shall be made with the same level of care a prudent person, familiar with investment matters, would use.

Valuing Fund Assets

The value of retirement system assets is always in flux. Just as the stock market registers gains and losses on a daily basis, the value of retirement assets also rises and falls. Assets which are **market valued** reflect their worth on a single date. The market value of a fund may rise or fall dramatically from day to day, thus it is considered a volatile measure. A negative aspect of market valuation is that dramatic fluctuations in the value of the retirement funds can trigger equally dramatic fluctuations in contribution rates. This is not desirable when the goal is to develop stable rates over several years.

To value assets in a less volatile manner, a "smoothing" technique is used in the contribution rate-setting process. In 1998 and 1999, the smoothing process recognized 50% of the gain or loss over the valuation interest rate in the valuation year. The other 50% of investment performance is recognized over the subsequent two years. (Thirty percent is recognized in the second year and 20% in the third.) Beginning in 2000, gains or losses are recognized evenly over four years.

By smoothing investment returns, annual results are now spread over a four-year period and overlapped with other years' results. **Valuation assets** is the specific term used to describe assets which have been calculated in this manner.



2000 ACTUARIAL VALUATION REPORT

Investment gains and losses are the amount of earnings over or under the rate of return assumption used in calculating contribution rates. Currently that rate is 8% for all systems. If a fund realizes a return of 10%, the gain would be 2%. If investment returns are 5%, the fund posts a loss of 3%.

Allocation of Assets

The holdings of the Washington retirement systems can be divided into eight classes. In descending order of magnitude they are:

U.S. Equity: Stock in U.S. companies.

Non-U.S. Equity: Stock in foreign companies.

U.S. Fixed Income: U.S. Treasury and government bonds; investment-grade corporate bonds; publicly traded mortgage-backed securities; mortgages; asset-backed and convertible securities.

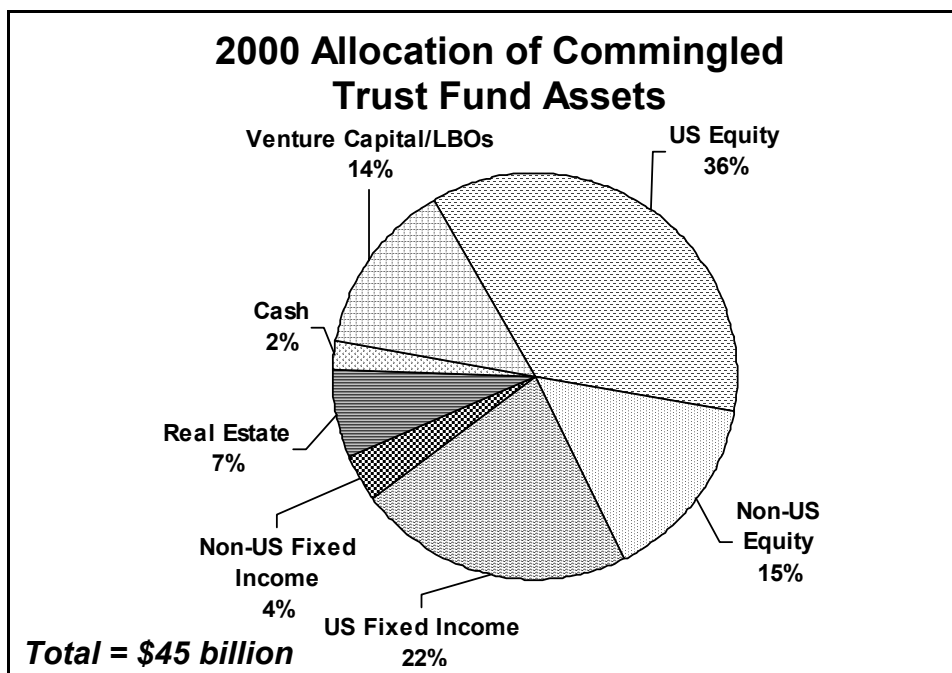
Venture Capital: Equity financing of early expansion and later-stage growth of small businesses.

Leveraged Buy-outs (LBOs): The purchase of all assets or stock in a company using borrowed funds.

Real Estate: Office and retail space; apartments; warehouses; hotels; etc.

Non-U.S. Fixed Income: Foreign government bonds.

Cash: Money held while being transferred between investments or placed temporarily in an interest-bearing account.



ASSETS

2000 Washington Retirement System Assets

<i>(Dollars in Millions)</i>	PERS	TRS¹	SERS	LEOFF	WSP	Total
U.S. Equity	7,624	5,390	649	2,755	249	16,666
Non-U.S. Equity	2,940	2,366	250	1,062	96	6,715
U.S. Fixed Income	4,787	2,851	407	1,730	156	9,931
Non-U.S. Fixed Income	812	514	69	293	26	1,715
Cash	257	303	31	97	8	696
Real Estate	1,605	941	137	580	52	3,314
Venture Capital	1,993	1,029	170	720	65	3,977
Leveraged Buy-outs	1,042	594	89	376	34	2,134
Accruals, etc.	85	1,505	12	25	2	1,628
Total	\$ 21,144	\$ 15,494	\$ 1,813	\$ 7,638	\$ 688	\$ 46,777
Plan 3 Member Accounts	—	1,696	15	—	—	1,711
Payables	8	596	8	1	0	612
Market Value Assets	\$ 21,136	\$ 13,202	\$ 1,790	\$ 7,638	\$ 688	\$ 44,453
Valuation Assets	\$ 21,859	\$ 12,622	\$ 1,853	\$ 7,899	\$ 712	\$ 44,945
Valuation Assets as Percent of Market Value Assets	103.4%	95.6%	103.5%	103.4%	103.4%	101.1%

Totals may not agree due to rounding.

¹ TRS assets as of June 30, 2000. All other systems as of December 31, 2000.

² Accruals for TRS include the collateral held under the Security Lending Agreement.

³ The payable for TRS includes the offsetting collateral held under Security Lending agreements.



2000 ACTUARIAL VALUATION REPORT

Growth of Assets 1996-2000

Growth in the retirement funds comes from two sources: contributions and earnings on investments. In almost all years, investment earnings account for the largest component of asset growth.

Very strong investment return has produced a significant growth in assets and corresponding reduction in required contribution rates. Falling contribution rates have resulted in declining dollar contribution levels despite growth in total salaries.

Benefits tend to grow at a more uniform rate unrelated to investment return. The benefit payments of Plans 1 are growing close to 10% per year. Assets of Plans 1 only continue to grow when there is strong investment return. The first 4% of investment return is currently needed to pay benefits. Contributions are

dropping and benefits are increasing each year. Benefit payments will soon exceed investment return and assets will begin to decline.

The Plans 2/3 are still very much in a positive cash flow position. Contributions and investment return are much greater than benefit payments and refunds. Despite declining contribution rates the Plans 2/3 assets should continue to grow over the next several years.

Economic Components of the Valuation

In determining contribution rates for the state retirement systems, the valuation process does not use the actual economic indicators for that time period. Actual rates for specific time periods can only be determined after the fact. Instead, assumptions about future rates of economic activity are used. Assumptions for the 2000 valuation were adopted in statute.

Detail of Asset Growth: Plan 1 and WSP

<i>(Dollars in Millions)</i>	1996	1997	1998	1999	2000
Beginning Balance	\$ 16,055	\$ 18,184	\$ 20,868	\$ 23,321	\$ 26,246
Contributions	663	653	654	621	510
Earnings on Investment	2,572	3,203	3,076	3,668	1,233
Benefit Payments & Refunds	(1,098)	(1,172)	(1,277)	(1,366)	(1,492)
Ending Balance	\$ 18,184	\$ 20,868	\$ 23,321	\$ 26,246	\$ 26,497

Detail of Asset Growth: Plan 2/3

<i>(Dollars in Millions)</i>	1996	1997	1998	1999	2000
Beginning Balance	\$ 8,327	\$ 10,297	\$ 12,810	\$ 14,490	\$ 17,330
Contributions	698	741	719	569	406
Earnings on Investment	1,347	1,884	1,856	2,534	450
Benefit Payments & Refunds ¹	(75)	(114)	(895)	(263)	(229)
Ending Balance	\$ 10,297	\$ 12,808	\$ 14,490	\$ 17,330	\$ 17,956

¹ Includes transfers to Plan 3 Defined Contribution accounts.



The PFC is a relatively new body, created specifically to adopt the economic assumptions and contribution rates used in retirement system valuations. It is comprised of six representatives: the directors of the Department of Retirement Systems and Office of Financial Management; and the chair and ranking minority member of the House and Senate fiscal committees.

The PFC is responsible for:

- Adopting changes to economic assumptions and contribution rates; and
- Administering a biennial actuarial audit of the contribution rate-setting valuation.

The economic returns shown on the following page are the actual gains and losses recorded for the past five years. These numbers are used to determine the value of assets and monitor the difference between assumptions and experience. Except for TRS, results shown are for calendar year periods. TRS data is based on the fiscal year ending June 30.

Salary increases do not include data from members in their early years of employment. These members are excluded because their earnings are boosted annually by "step" and "longevity" increases. Salary growth shown is generated by general cost-of-living increases, job changes, etc.

The Consumer Price Index shown is the Seattle/Tacoma/Bremerton area series for urban wage earners and clerical workers. This series determines COLA increases for almost all system benefits. PERS 1 disability and Judge's Retirement System increases are based on two slightly different series.

Economic Assumptions	
Future Salaries	4.50%
Earnings on Member Contributions	5.50%
Return on Investments	8.00%
Inflation	3.50%
Growth in Membership	
PERS, SERS, LEOFF, WSP	1.25%
TRS	0.90%

2000 ACTUARIAL VALUATION REPORT

	1996	1997	1998	1999	2000
Rate of Return on Market Value Assets¹					
All Systems	15.1%	17.4%	14.1%	18.4%	0.5%
Rate of Return on Valuation Assets²					
PERS	15.1%	17.4%	15.2%	16.8%	10.1%
TRS	14.3%	18.4%	18.1%	14.7%	11.9%
SERS	15.1%	17.4%	15.2%	16.8%	10.1%
LEOFF	15.4%	17.1%	15.3%	16.9%	10.1%
WSP	15.2%	17.5%	15.4%	16.9%	10.1%
Salary Increases²					
PERS	4.1%	3.0%	3.5%	3.7%	4.7%
TRS	4.5%	1.1%	3.9%	1.1%	5.9%
SERS	4.1%	3.0%	3.5%	3.7%	3.1%
LEOFF	4.2%	4.3%	5.0%	3.9%	3.4%
WSP	7.5%	8.6%	6.5%	7.2%	2.9%
Seattle/Tacoma/Bremerton CPI - W¹					
All Systems	3.3%	3.1%	2.6%	3.1%	3.7%

¹ Calendar year.

² As of June 30 for TRS, December 31 for all other systems.

Plan 3 Defined Contribution Accounts

Since 1996, the state has also administered a second form of retirement savings – Plan 3 members' defined contribution (DC) accounts. Initially, these accounts were available only to members of TRS 3. Legislation since 1996 has created Plan 3 tiers for school district employees and public employees. As these plans become operational, the number of members with DC accounts and the amount of money they have invested is expected to increase sharply.

Contributions to DC accounts are made in pre-tax dollars, at a rate that is determined by individual members. There are six contribution options from which to choose. Once selected, members may not change their contribution rate

unless they change employer. The following table indicates the percent of TRS 3 members investing at each of the rates available in 2000.

Plan 3 Contribution Rate Options		
Option	Contribution Rate	Active Members¹
A.	5%	37%
B.	5% until age 35 6% from age 35-45 7.5% age 45 and above	11%
C.	6% until age 35 7.5% from age 35-45 8.5% age 45 and above	14%
D.	7%	18%
E.	10%	13%
F.	15%	7%

¹ TRS and SERS members combined. As of August 2001..

Members may choose how their contributions will be invested, selecting from two basic programs: the Total Allocation Portfolio (TAP) or Self-directed Investments. The TAP fund provides members with an investment option that pays the same rate of return realized by the Co-mingled Trust Fund (CTF). The CTF is managed and invested by the State investment Board to fund the defined benefits provided in Plans 1 and 2.

The Self-directed Investments Program provides a menu of investment funds into which members may direct contributions. Members may not contribute to the TAP and Self-directed programs at the same time, but can retain balances in each.

TRS Plan 3 Defined Contribution Fund Balances		
Fund	12/31/2000 Market Value	Rate of Return ¹
TAP	\$789,616,121	3.51%
Long-Horizon Fund	2,557,939	N/A
Mid-Horizon Fund	1,095,451	N/A
Short-Horizon Fund	212,331	N/A
US Stock Fund	224,503,449	N/A
US Large Stock Fund	219,375,280	-9.11%
US Small Stock Fund	98,941,331	-2.90%
International Stock Fund	93,356,528	-15.08%
Bond Market	87,942,471	N/A
Money Market	87,182,814	6.66%
Total	\$1,604,783,715	

¹ N/A indicates fund offered less than one year.



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